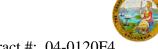
## **DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-009896 Address: 333 Burma Road **Date Inspected:** 30-Oct-2009

City: Oakland, CA 94607

OSM Arrival Time: 1900 **Project Name:** SAS Superstructure **OSM Departure Time:** 700 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name:** See Below **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component: OBG** Fabrication

**Summary of Items Observed:** 

CWI Inspectors: Mr.Liu Fa Wen, Mr. Zhu Zhong Hai, Mr. Lu Li Qing

On this date CALTRANS OSM Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. This QA Inspector observed the following:

#### **OBG BAY 2**

This QA Inspector observed ZPMC welder Ms. Zhang Sumei, stencil 207464, is using shielded metal arc welding procedure WPS-345-SMAW-2G(2F)-Repair to make repairs to various weld terminations on floor beam FB3023-001. This QA Inspector observed a welding current of approximately 130 amps. This QA Inspector observed Ms. Zhang Sumei is certified to make this weld and the shielded metal arc welding electrodes are being stored in an electrically heated electrode storage container which is warm to the touch. Items observed on this date appeared to generally comply with applicable contract documents.

#### **OBG BAY 5**

This QA Inspector observed ZPMC welder Mr. Shen Tianju, stencil 215083, is using shielded metal arc welding procedure WPS-345-SMAW-2G(2F)-Repair to make repairs to flame cut notches on the edges of various traveler rail plates as referenced on ZPMC weld repair report B-WR8254. This QA Inspector observed a welding current

# WELDING INSPECTION REPORT

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of approximately 120 amps. This QA Inspector observed Mr. Shen Tianju is certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Ms. Hu Xiuli, stencil 215248, is using shielded metal arc welding procedure WPS-345-SMAW-2G(2F)-Repair to make repairs to flame cut notches on the edges of various traveler rail plates as referenced on ZPMC weld repair report B-WR8254. This QA Inspector observed a welding current of approximately 125 amps. This QA Inspector observed Ms. Hu Xiuli is certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

#### **OBG Bay 13**

This QA Inspector observed ZPMC welder Mr. Hu Yacheng, stencil 049339 is using shielded metal welding process WPS-B-P-2214-B-U2-FCM-1 to make OBG repair weld SEG068A-020 R1. This QA Inspector measured a welding current of approximately 160 amps and Mr. Hu Yacheng appears to be certified to make this weld 4G position (overhead) weld. This QA Inspector observed the shielded metal arc welding electrodes are being stored in an electrically heated electrode storage container with an external temperature that is approximately ambient and this QA inspector felt the welding electrodes inside the storage container and they are slightly warm to the touch. Mr. Hu Yacheng repositioned the electrode storage container to the welding power supply cable. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Hong Liang, stencil 200113 is using shielded metal welding process WPS-B-P-2214-B-U2-FCM-1 to make OBG repair weld SEG068A-005 R1. This QA Inspector measured a welding current of approximately 170 amps and Mr. Hong Liang appears to be certified to make this weld 4G position (overhead) weld. This QA Inspector observed the shielded metal arc welding electrodes are being stored in an electrically heated electrode storage that is warm to the touch. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Ms. Jin Chen Mao, stencil 058551 is using flux cored welding procedure WPS-B-T-2231-TC-O4-F to make OBG weld SSD19A-PP097-108. This QA Inspector measured a welding current of approximately 260 amps and 28.0 volts and Ms. Jin Chen Mao is certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Zhao Jibo, stencil 055564 has recently used flux cored welding procedure WPS-B-T-2333-B-U2-F to make OBG weld SSD19-PP102. This QA Inspector observed ZPMC QC Inspector Mr. Guo Xing Hui has recorded a welding current of 219 amps and 29.6 volts. This QA Inspector observed that Mr. Zhao Jibo is certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

## **OBG Bay 14**

This QA Inspector observed ZPMC welder Mr. Tu Zhi Wu, stencil 214945 is using flux cored welding procedure WPS-B-T-2132 to make OBG weld DP130-001-050 between a diaphragm plate and a closed rib on deck panel DP130-001. This QA Inspector observed ZPMC Quality Control Inspector Mr. Zang Xian Ji has recorded a welding current of 312 amps and 30.4 volts and this QA Inspector measured a welding current of 290 amps and 30.

# WELDING INSPECTION REPORT

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5 volts. This QA Inspector verified Mr. Tu Zhi Wu is certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Li Xian You, stencil 047866 has recently used flux cored welding process WPS-B-T-2233-B-U2-F to make OBG weld SEG051A-019. This QA Inspector observed ZPMC QC inspector Mr. Xu Tao has recorded a welding current of 210 amps and 25.3 volts. This QA Inspector observed Mr. Li Xian You appears to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

#### **Summary of Conversations:**

See Above.

## **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang phone: 150-0042-2372, who represents the Office of Structural Materials for your project.

<b>Inspected By:</b>	Dawson,Paul	Quality Assurance Inspector
Reviewed By:	Carreon, Albert	QA Reviewer